

REMARKS

This paper is filed in response to the Office Action of May 26, 2009 in which claims 1, 14, 15 and 25-41 were rejected.

I. Amended claims

No claim amendments have been performed.

II. Prior art

Detecting Web Page Structure for Adaptive Viewing on Small Form Factor Devices (Chen)

Chen discloses a page adaption technique to analyze the structure of an existing web page and to split it into small units that fit into the screen of a mobile device. The analysis of the webpage is performed in three steps. Firstly, the high level content blocks, such as header, footer and side bar, are identified. For example, the header is detected by defining a threshold N, wherein the upper N pixels of a webpage are the header region. Secondly, the content within each high level content block is further analyzed to identify explicit separators, such as <HR> and <TABLE>, splitting the high level content block. Thirdly, implicit separators are detected and used to split the content block further. Basically, a top-down approach of dividing a page into smaller areas is disclosed by *Chen*.

III. Subject-matter of the invention

Present claim 1 is directed at a method comprising the following features:

- A At least partially dividing at least one page into a plurality of areas.
- B Presenting said plurality of areas in a first representation.
- C Making at least one area of said plurality of areas an active area.
- D In response to a user operation on said at least one active area, presenting at least one of said at least one active areas in a second representation.

Wherein said at least partially dividing at least one page into a plurality of areas comprises:

- E.1 element-wise rendering elements contained in said at least one page to obtain a rendered object with a maximum height and a maximum width, checking if a size of said rendered object exceeds a threshold, and forming an area from said rendered object if said threshold is exceeded, and
- E.2 checking if at least one edge of said formed area is not straight, and forming a smaller area from said rendered object if at least one edge is not straight.

IV. Novelty and inventiveness of the independent claims

Chen neither discloses feature E.1 nor E.2.

Feature E.1 describes "element-wise rendering" elements contained in a page to obtain a rendered object with a certain size. Thus, according to the present invention elements of a page are combined to objects representing a certain area of the rendered page. Basically, a bottom-up approach of splitting a page into several areas is performed, where the size of the rendered object increases with the number of iterations.

The Examiner argues on page 3, last paragraph, of the office action that feature E.1 is disclosed by *Chen*, because *Chen* proposes to "try to classify a node into one of the header, the footer, [...]. If it belongs to none of the above, then we [*Chen*] check if it is small enough to put it in the body. [...] If the node exceeds the threshold, it will be split further." However, this describes a top-down approach, where the size of the rendered object decreases with the number of iterations. According to *Chen* the page is analyzed as a whole and divided within this (first) step into rendered objects (high level content blocks). For instance it is said on page 3 section 3.2.1 (first sentence) that "the DOM tree is traversed from <BODY> to its leaves to select appropriate nodes and

put them into a corresponding high level content block," which corresponds to a rendered object.

In contrast to this, the present invention describes the combination of elements of a page to a rendered object. Since the size of the rendered objects increases with the number of iterations according to the present invention it is proposed to form an area of the rendered object if a threshold size is exceeded. In the same case *Chen* however proposes to split the object further, because the size of the rendered objects decreases with the number of iterations according to their method. This difference indicates the different approaches of *Chen* and the present invention, namely top-down and bottom-up, which must be distinguished.

In this respect, it appears that the Examiner's response to applicant's arguments, which is item 4 of the Office Action, is mainly based on an erroneous comprehension of *Chen*. On page 6, first paragraph, of the Office Action the Examiner argues with respect to element-wise rendering elements to obtain a rendered object with maximum height and width that "this is clearly shown in the Selecting Nodes section [of *Chen*], wherein node areas are formed by placing them into 4 categories (header, footer, left side and right side bar), but if they area is too small it is checked to be placed into the body using thresholds, i.e. if the area exceeds this body threshold, it should belong to one of the previous four blocks. "

However, *Chen* clearly states in the section "Selecting Nodes", that "if [the node] belongs to none of the [4 categories], then we check if it is small enough to put it into the body block. [...] If the node exceeds the thresholds, it will be split further." Thus, according to *Chen* a node exceeding the "body threshold" will be split further and will not be assigned to one of the other four categories.

Furthermore, *Chen* proposes a header and footer detection, which is mainly based on a threshold N. However, he does not describe an assignment of nodes to header and footer, which is based on a maximum size of the node area.

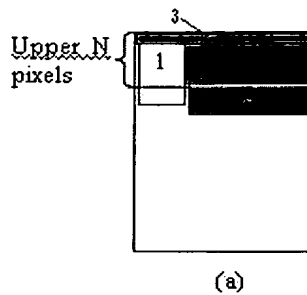
Thus, feature E.1 is novel with respect to *Chen*.

Feature E.2 guarantees that all edges of a formed area are straight. With respect to this feature the Examiner argues on page 4, first paragraph, of the office action that "areas 1 and 2" of Fig 6(a) of *Chen* "do not form a straight edge, both cannot belong to header, a smaller area 2 is formed to belong to header region." From Applicant's point of view this argumentation does not follow the idea of section 3.2.2 of *Chen*, which describes the detection of the header and the footer of a page.

In *Chen*, a definition of a fixed threshold N is proposed, wherein all nodes within the upper N pixels of a page are classified into the header area. Fig. 6a illustrates the challenge for selecting an appropriate N. The fixed definition of N does not allow including area 2 of Fig. 6a into the header while excluding area 1, thus a dynamic threshold is proposed, where N increases with a decreasing height/width ratio of an area. This is due to the observation that most elements of a header or footer have a small height/width ratio.

However, this does not guarantee that all edges of a formed area are straight.

The following figure has been modified from Fig. 6a of *Chen*. It still shows area 1 and 2 and, additionally, the header area identified by using a dynamic threshold, which has been colored dark. Since area 3, which has been added to Fig. 6a, has a smaller height/width ratio than area 2 and it is located above area 2 it is included into the header area. Thus, the lower edge of the dark colored header area is not straight and feature E.2 is obviously not disclosed by *Chen*.




To summarize, *Chen* does not provide any specifics to the process of page splitting that corresponds to either feature E.1 or feature E.2 and, therefore, independent claim 1 is novel over *Chen*.

Feature E.1 and E.2 are also not rendered obvious by *Chen* or by a combination of it and/or documents cited in earlier Office Actions and, consequently, independent claim 1 is also non-obvious. Accordingly, all other independent claims are also novel and inventive, since they have basically the same features like independent claim 1.

The objections and rejections of the Office Action of May 26, 2009, having been obviated by amendment or shown to be inapplicable, withdrawal thereof is requested and passage of claims 1, 14, 15, and 25-41 to issue is earnestly solicited.

Respectfully submitted,


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